



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of ) Attorney Docket No.: 001-US-02  
John Raymond ESSIG Jr. et al. )  
Serial No.: 10/729,145 ) Confirmation No. 1349  
Filed: December 4, 2003 ) Group Art Unit: 2821  
For: MODULAR INFLATABLE ) Examiner: Shih Chao CHEN  
MULTIFUNCTION FIELD- ) Date: July 18, 2005  
DEPLOYABLE APPARATUS AND )  
METHODS OF MANUFACTURE )

**INFORMATION DISCLOSURE STATEMENT**

**MAIL STOP: Amendment**

Customer Service Window  
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Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, this Information Disclosure Statement in connection with the above-identified application is being filed in accordance with 37 C.F.R. §1.97(c).

Documents A to L, O, T to V, and X identified on forms PTO/SB/08A are cited in the present specification. Accordingly, no further comment regarding the disclosures of these documents is believed to be required.

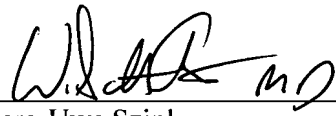
Document M relates to a parabolic fiber optic luminare. Document N relates to a concentrating and collecting optical system using concave toroidal reflectors. Document P relates to an illuminated balloon having a self-contained light member. Document Q relates to an apparatus for projecting electromagnetic radiation with a tailored intensity distribution.

Document R relates to a concave reflecting mirror for a light source. Document S relates to an inflatable reflector. Document W relates to decorative illuminated balloons. Document Y relates to an apparatus for projecting electromagnetic radiation with a tailored intensity distribution. Document Z relates to inflatable concentrators for solar propulsion and dynamic space power. Document AA related to inflatable structures taking flight. Document AB relates to inflatable deployable space structure technology. Document AC relates to operation of a thin-film inflatable concentrator system demonstrated in a solar thermal vacuum environment. Document AD relates to inflatable structures and how they will held study the universe. Document AE relates to inflatable concentrators. Document AF relates to inflatable space structures. Accordingly, no further comment with regard to the disclosures of these documents is believed to be required.

It is respectfully requested that the attached documents be considered and officially cited, and that a copy of Form PTO/SB/08A&B be initialed by the Examiner to indicate that the documents have been considered and returned to the undersigned.

The requisite fee of \$180.00 is attached herewith. It is believed that the present Information Disclosure Statement complies with the requirements of 37 C.F.R. § 1.97-8, but the Director is hereby authorized to charge any additional fees to Deposit Account No. 50-1281.

Respectfully submitted,  
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PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/729,145
Filing Date	December 4, 2003
First Named Inventor	John R. ESSIG Jr.
Art Unit	2821
Examiner Name	Shih Chao CHEN
Attorney Docket Number	001-US-02

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**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A	US- 2,977,596	03-28-1991	Justice	
	B	US- 3,005,987	10-24-1961	Mack et al.	
	C	US- 3,056,131	09-25-1962	McCreary	
	D	US- 3,221,333	11-30-1965	Brown	
	E	US- 3,326,624	06-20-1967	Maydell et al.	
	F	US- 3,413,645	11-26-1986	Koehler	
	G	US- 3,471,860	10-07-1969	Amburgey	
	H	US- 4,352,112	09-28-1982	Leonhardt et al.	
	I	US- 4,672,389	06-09-1987	Ulry	
	J	US- 4,741,609	05-03-1988	Sallis	
	K	US- 4,755,819	10-05-1988	Bernasconi et al.	
	L	US- 5,276,600	01-04-1994	Takase et al.	
	M	US- 5,486,984	01-23-1996	Miller	
	N	US- 5,836,667	11-17-1998	Baker et al.	
	O	US- 5,893,360	10-13-1999	Stoumen et al.	
	P	US- 5,947,581	09-07-1999	Schrimmer et al.	
	Q	US- 5,967,652	10-19-1999	Ramer et al.	
	R	US- 6,102,555	08-15-2000	Mizoguchi	
	S	US- 6,771,229	08-03-2004	Thornburgh	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	T	FR 1,048,681	12-23-1953	Tarcici		
	U	GB 758,090	09-26-1956	Suchy et al.		
	V	JP 59-097205	06-05-1984	Yasuo		

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND**

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Examiner Name	Shih Chao CHEN
Attorney Docket Number	001-US-02

Sheet 3 of 3

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	Z	G. Grossman et al., Inflatable Concentrators for Solar Propulsion and Dynamic Space Power, J. Solar Energy Engineering, vol. 112, 1990, pp. 229-236.	
	AA	Michael A. Dornheim, Inflatable Structures Taking to Flight. Aviation Week & Space Technology, January 25, 1999, pp. 60-62, downloaded from www.lgarde.com.	
	AB	R.E. Freeland et al., Inflatable Deployable Space Structures Technology Summary. International Aeronautics Federation, 1998, 16 pages.	
	AC	Wayne A. Wong, Operation of a Thin-film Inflatable Concentrator System Demonstrated in a Solar Thermal Vacuum Environment, 3rd AIAA Gossamer Spacecraft Forum, Apr. 2002, 3 pgs	
	AD	Inflatable Structures in Space Will Help Study Universe. NASA/JPL News Release, August 20, 2000, 3 pages.	
	AE	Carol M. Tolbert, Inflatable Concentrators. www.grc.nasa.gov/WWW/tmsb/concentrators/doc/inflatable.html (last updated August 1, 2002), 3 pages.	
	AF	Mitchell Thomas, Inflatable Space Structures. Downloaded from www.lgarde.com on February 27, 2003, 4 pages.	

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Considered

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